# RFP-5-11 SECTION ONE GENERAL INFORMATION AND REQUESTED PRODUCTS/SERVICES

#### 1.1 INTRODUCTION

The Indiana Department of Administration (IDOA), acting on behalf of the Counter-Terrorism and Security Council (CTASC), requires quality assurance/quality control (QA/QC) services for the 2005 state-wide aerial photography project. It is the intent of IDOA to solicit responses to this Request for Proposals (RFP) in accordance with the statement of work, proposal preparation section, and specifications contained in this document. This project has a high profile for the State.

#### 1.2 DEFINITIONS AND ABBREVIATIONS

Following are explanations of terms and abbreviations appearing throughout this RFP. Other special terms may be used in the RFP, but they are more localized and defined where they appear, rather than in the following list.

Acceptance The designated period following completion of QA/QC services.

During the acceptance period, the State will evaluate all features

and performance of the QA/QC services.

IAC The Indiana Administrative Code

IC The Indiana Code

Installation The delivery and physical setup of products or services requested

in this RFP.

Joint Bid When more than one company submits a proposal in order to be

contracted in the RFP process. (The State does not allow joint

bids).

Lift A single sortie by an aircraft to acquire aerial photography.

Products Tangible goods or manufactured items as specified in this RFP.

Proposal An offer as defined in IC 5-22-2-17.

Respondent An offeror as defined in IC 5-22-2-18.

Services Work to be performed as specified in this RFP.

State agency As defined in IC 4-13-16.5-1

A) An authority, board, branch, commission, committee,

department, division, or other instrumentality of the executive, including the administrative department of state government.

- B) An entity established by the general assembly as a body corporate and politic.
- C) A state educational institution.

Vendor

Any successful respondent selected as a result of the procurement process to deliver the products and services requested by this RFP.

#### 1.3 PURPOSE OF THE RFP

The State of Indiana is soliciting proposals and fees to establish a contract through negotiations with a qualified contractor to provide quality assurance (QA/QC) for the 2005 Indiana state-wide digital orthophotography project.

The State of Indiana has contracted with a vendor, EarthData International (EarthData), to capture new aerial imagery in the Spring of 2005, and to produce new digital color orthophotography. The main deliverable will be 1-foot ground sample distance (pixel) orthophotography for all of Indiana. Thirteen counties will receive 6-inch resolution pixel orthophotos. Additional deliverables include 1-meter color infrared imagery statewide, a digital surface model, and a digital elevation model.

More information about the aerial imagery deliverables can be found on:

http://www.in.gov/ingisi/Fact%20Sheet%203\_Product%20List.pdf

The primary goal of CTASC is to have geographically accurate and visually useful color photos that adhere to CTASC specifications. It is also important for the product to be delivered in a timely manner. While other QA/QC tasks shall be performed, they will be of secondary priority to the accuracy, usability and timeliness of delivery of the imagery products.

The QA/QC vendor shall work with the State and EarthData to assure that the deliverable products meet the requirements. The QA/QC review will consist of three (3) primary activities:

- Review for completeness.
- Review for aesthetics as per the orthophotography specifications.
- Review for accuracy to the ground.

The State expects the QA/QC vendor to follow industry standard project management practices. CTASC expects the QA/QC vendor to track deliverables; establish, document and follow quality assurance processes; and communicate the status and acceptability of the deliverable products.

The proposal requested here does not include project management of the aerial photo

mission or oversight of the acquisition vendor (EarthData) or their subcontractors.

#### 1.4 SCOPE OF THE RFP

This document contains the following information that may be useful to anyone wishing to submit a proposal:

Section One – A description of many factors affecting the proposal process and procedures.

Section Two – A description of the required format and subject content of any acceptable proposals offered in response to this document.

Section Three – A general discussion of the method that will be used by an evaluation team in selecting a respondent to recommend to State officials with whom to enter contract negotiations.

Attachments – Details supporting this basic RFP document.

#### 1.5 ISSUING OFFICE

In accordance with Indiana statute, IDOA has issued this RFP on behalf of CTASC. The content has been prepared by the staff of CTASC and others. This RFP is being posted to the State of Indiana website (<a href="http://www.in.gov/idoa/proc">http://www.in.gov/idoa/proc</a>) for downloading. A nominal fee will be charged for providing hard copies.

## 1.6 DUE DATE FOR PROPOSALS AND QUESTIONS

NOTE: Indianapolis and most of Indiana remain on Eastern Standard Time year round. When the nation is on Standard time, Indianapolis observes Eastern Standard Time, and is on the same time as New York City. When most of the nation is observing Daylight Savings Time, Indianapolis observes Eastern Standard Time (which is the same as Central Daylight Time) and is on the same time as Chicago.

All proposals must be received at the address below by the Procurement Division no later than **3 p.m. Eastern Standard Time** on **April 15, 2005**. Each respondent must submit one original (marked "Original") and two (2) complete copies of the proposal, including the transmittal letter and other related documentation as required in this RFP. A complete copy of the proposal must be provided on a CD-ROM as either an MS Word document or Adobe PDF file. No more than one proposal per respondent should be submitted. Each copy of the proposal must follow the format indicated in Section Two of this document. Unnecessarily elaborate brochures or other presentations, beyond that sufficient to present a complete and effective proposal, are not desired. All proposals must be addressed to:

James Osborne Procurement Division Indiana Department of Administration 402 West Washington Street, W468

#### Indianapolis, IN 46204

All proposal packages must be clearly marked with the RFP number, due date, and time due. Any proposal received by the Procurement Division after the due date and time will not be considered. Any late proposals will be returned, unopened, to the respondent upon request. All rejected proposals not claimed within 30 days of the proposal due date will be destroyed.

No more than one proposal per respondent should be submitted.

The State of Indiana accepts no obligations for costs incurred by respondents in anticipation of being awarded a contract.

All proposals submitted to the State should be double-sided and printed on 30% post-consumer recycled content paper or tree-free paper. When possible, soy ink should be used.

Caution to respondents about shipping/mailing: United States Postal Express and Certified Mail are both delivered to the Government Center Central Mailroom and not directly to the designated department. It is the responsibility of the respondent to make sure that solicitation responses are received by the Procurement Division on or before the designated time and date. Late submissions will not be accepted. The IDOA Procurement clock is the official time for all solicitation submissions.

# 1.6.1 Questions/Inquiries

All questions regarding this RFP must be submitted in writing to the above address no later than **3 p.m. Eastern Standard Time** on **April 1, 2005**. Inquiries may also be submitted via fax (**317-234-1281**) or email <a href="mailto:rfp@idoa.state.in.us">rfp@idoa.state.in.us</a> and must be received by IDOA Procurement by the time and date indicated above. Questions submitted after 3 p.m. may not be considered.

Following the question due date, IDOA personnel will assemble a list of the compiled questions asked by all respondents. The responses will be posted to the IDOA website approximately one week after the question due date listed in the RFP timetable, Section 1.26. The Question and Answer link will not become active until IDOA has provided responses to all questions. IDOA reserves the right to judge whether any questions should be answered in writing, and copies will be placed on the Procurement page on the State's web site for downloading. Only answers signed by the Director of the Procurement Division or designee or posted on the State's web site will be considered official and valid by the State. No negotiations, decisions, or actions shall be initiated by any respondent as a result of any verbal discussion with any State employee.

Inquiries are not to be directed to any staff member of CTASC. Such action may disqualify respondent from further consideration for a contract as a result of this RFP.

#### 1.7 PRE-PROPOSAL CONFERENCE

A pre-proposal conference has been scheduled for Wednesday March 30, 2005, from 1:00pm to 3:00pm. The conference will be held in the Indiana Government Center South building, Conference Room CC-20, 402 West Washington Street, Indianapolis, Indiana. At this conference, potential respondents may ask questions about the RFP and the RFP process. Respondents are reminded that no answers issued verbally at the conference are binding on the State and any information provided at the conference, unless it is later issued in writing, also is not binding on the State.

#### 1.8 MODIFICATION OR WITHDRAWAL OF OFFERS

Responses to this RFP may be modified or withdrawn in writing with notice sent to IDOA Procurement by mail, fax or e-mail received prior to the exact hour and date specified for receipt of proposals. The respondent's authorized representative may withdraw the proposal in person, providing his or her identity is made known and he or she signs a receipt for the proposal. Proposals may not be withdrawn after the proposal due date and time has passed.

Modification to or withdrawal of a proposal received by the Procurement Division after the exact hour and date specified for receipt of proposals will not be considered. If it becomes necessary to revise any part of this RFP or if additional data is necessary for an exact interpretation of provisions of this RFP prior to the due date for proposals, an addendum will be posted the IDOA Procurement Division website. If such addenda issuance is necessary, IDOA reserves the right to extend the due date and time of proposals to accommodate such additional data requirements.

## 1.9 PRICING

IDOA requests the pricing associated with this RFP be a firm proposal price that must remain open and in effect for a period of not less than 180 days from the proposal due date.

Pricing for the proposal is presented as shown in Table 1 shown in section 2.3.7 of this request for proposals. Completion of Table 1, section 2.3.7 will satisfy the requirement for pricing in this request for proposals.

CTASC and IDOA recognize there are certain industry practices for service providers. However, the Departments encourage respondents, in their responses to the RFP, to be as creative as possible regarding cost to the State, as cost efficiency for the State will be a consideration in determining whether a contract(s) will be awarded based on responses to the RFP.

#### 1.10 DISCUSSION FORMAT/BEST AND FINAL OFFERS

The State reserves the right to conduct discussions, either oral or written, with those

respondents determined by the State to be reasonably viable to being selected for award. If discussions are held, the State may ultimately request best and final offers. IDOA Procurement will schedule all discussions. Any information gathered through oral discussions should be confirmed in writing.

The request for best and final offers may include:

- Notice that discussions are concluded.
- Notice that this is the opportunity to submit written best and final offers.
- Notice of the date and time for submission of the best and final offer.
- Notice that if any modification is submitted, it must be received by the date and time specified or it will not be considered.
- Notice of any changes in the State's requirements.

The State reserves the right to reject any or all proposals received or to award, without discussions or clarifications, a contract on the basis of initial proposals received. Therefore, each proposal should contain the respondent's best terms from a price and technical standpoint. The State reserves the right to reopen discussions after receipt of best and final offers if it is clearly in the State's best interest to do so and the Director of the Procurement Division or designee makes a written determination of that fact. If discussions are reopened, the State may issue an additional request for best and final offers from all respondents determined by the State to be reasonably susceptible to being selected for award.

Following evaluation of the best and final offers, the State may select for negotiations the offers that are most advantageous to the State, considering cost and the evaluation factors in the RFP.

The State also reserves the right to conduct clarifications to resolve minor issues. If only clarifications are sought, best and final offers may not be requested. The State retains sole authority to determine whether contact with respondents is for clarification or discussion.

#### 1.11 CONTRACT NEGOTIATIONS

After recommendation of a selected respondent by appropriate officials of the State, contract negotiations will commence. The contract will be based primarily on the required clauses of the State as indicated in the State contract as appears in Attachment B of this document; secondly, on those required clauses presented by the respondent that are acceptable to the State; and, additionally, on any desirable clauses that either party would like to incorporate into the contract. If at any time contract negotiation activities are judged to be ineffective by the Commissioner of IDOA or designee, IDOA will cause to cease all activities with that respondent and begin contract negotiations with the next highest ranked respondent. This process may continue until either both the respondent and the State of Indiana execute a completed contract or IDOA determines that no acceptable alternative proposal exists.

#### 1.12 REFERENCE SITE VISITS

The State may request a site visit to a respondent's working support center to aid in the evaluation of the respondent's proposal.

#### 1.13 TYPE AND TERM OF CONTRACT

The State of Indiana intends to sign a contract with one or more respondent(s) to provide the complete set of products and services listed in this RFP. The State will not entertain joint bids.

The term of this contract shall be for a period of two (2) years, beginning July 1, 2005 (or from date of final State approval of contract), and ending June 30, 2007 (or 24 months from the start date). There may be renewals for a total of two (2) more years at the State's option.

#### 1.14 CONTRACT OBLIGATIONS

Attachment B of this document is the form of the expected contract resulting from this RFP. Although the State anticipates that any respondent submitting a proposal will provide the major portion of the products and services as requested, subcontracting by the respondent is acceptable in performing the requirements of this RFP. However, the respondent must obtain the approval of IDOA before subcontracting any portion of the project's requirements and the subcontractor must have registered with the Indiana Secretary of State at least 45 days prior to the issuance date of this RFP if they are a regular corporation, Sub Chapter S Corporation, Limited Liability Corporation, Limited Partnership or Not-for-Profit Corporation. The respondent is responsible for the performance of any obligations that may result from this RFP and shall not be relieved by the non-performance of any subcontractor. Any respondent's proposal must identify all subcontractors, indicate that the subcontractor was registered with the Indiana Secretary of State at least 45 days prior to the issuance date of this RFP and outline the contractual relationship between the respondent and each subcontractor. Either a copy of the executed subcontract or a letter of agreement over the official signature of the firms involved must accompany each proposal. This RFP is subject to the Minority Business and Women's Enterprise Program. The requirements are explained elsewhere in the RFP.

Any subcontracts entered into by the respondent must be in compliance with all State of Indiana statutes and be subject to the provisions thereof. For each portion of the proposed products and services to be provided by a subcontractor, the technical proposal must include the identification of the functions to be provided by the subcontractor and the subcontractor's related qualifications and experience.

The combined qualifications and experience of the respondent and any or all subcontractors will be considered in the State's evaluation. The respondent must furnish information to the State as to the amount of the subcontract, the qualifications of the

subcontractor for guaranteeing performance, and any other data that may be required by the State. All subcontracts held by the respondent must be made available upon request for inspection and examination by appropriate State officials and such relationships must meet with the approval of the State.

#### 1.15 CONFIDENTIAL INFORMATION

Respondents are advised that materials contained in proposals are subject to the Indiana Public Records Act, IC 5-14-3 *et seq.*, and, after the contract award, the entire RFP file may be viewed and copied by any member of the public, including news agencies and competitors. Respondents claiming a statutory exception to the Indiana Public Records Act must place all confidential documents (including the requisite number of copies) in a sealed envelope clearly marked "Confidential" and must indicate in the transmittal letter and on the outside of that envelope that confidential materials are included. The respondent must also specify which statutory exception provision applies. The State reserves the right to make determinations of confidentiality. If the State does not agree that the information designated is confidential under one of the disclosure exceptions to the Indiana Public Records Act, it may either reject the proposal or discuss its interpretation of the allowable exceptions with the respondent. If agreement can be reached, the proposal will be considered. If agreement cannot be reached, the State will remove the proposal from consideration for award and return the proposal to the respondent. The State will not determine prices to be confidential information.

#### 1.16 STATE OF INDIANA OBLIGATIONS

The State of Indiana accepts no obligations for costs incurred by respondents in anticipation of being awarded a contract.

The State of Indiana creates no obligation, expressed or implied, by issuing this RFP or by receipt of any responses submitted pursuant hereto. The award of any contract(s) as a result of this RFP shall be at the sole discretion of CTASC and IDOA. Neither this RFP nor any response (proposal) submitted hereto are to be construed as a legal offer.

## 1.17 CONTRACT COMPONENTS

Any or all portions of this RFP and normally any or all portions of the respondent's response will be incorporated by reference as part of the final contract. Proprietary or confidential material submitted properly (see Section 1.15) will not be disclosed.

#### 1.18 PROPOSAL LIFE

All proposals made in response to this RFP must remain open and in effect for a period of not less than 180 days after the due date for proposals. Any proposal accepted by the State for the purpose of contract negotiations shall remain valid until superseded by a contract or until rejected by the State.

#### **1.19 TAXES**

The State of Indiana is exempt from federal, state, and local taxes. The State will not be responsible for any taxes levied on the respondent as a result of the contract resulting from this RFP.

#### 1.20 SECRETARY OF STATE REGISTRATION

In accordance with IC 5-22-16-4, before a respondent can do business with the State, the respondent must be registered with the Indiana Secretary of State. In order to be considered responsible, an offeror that is a business required to register with the Secretary of State must have registered with the Secretary of State at least 45 days before the RFP issuance date. If a respondent does not have such registration at present, the respondent should contact:

Secretary of State of Indiana Corporation Division 302 West Washington Street, E018 Indianapolis, IN 46204 (317) 232-6576

for the necessary application form, keeping in mind that the respondent will not be considered responsible for a current solicitation. It is each respondent's responsibility to assure that registration was at least 45 days prior to issuance of the RFP. Registration information will be verified prior to RFP recommendation.

#### 1.21 EQUAL OPPORTUNITY COMMITMENT

Pursuant to IC 4-13-16.5 and in accordance with 25 IAC 5-5-3, the Director of the Procurement Division of IDOA has determined that there is a reasonable expectation of minority and woman business enterprise participation in this contract. Therefore a contract goal of 5% IDOA certified minority business enterprise participation and 5% IDOA certified woman business enterprise participation has been established and all respondents will be expected to comply with the regulation set forth in 25 IAC 5-5-3.

Compliance with these regulations will be taken in to consideration during the evaluation phase of the RFP process.

#### 1.22 MINORITY & WOMEN'S BUSINESS ENTERPRISE PARTICIPATION PLAN

In accordance with 25 IAC 5 1-8, the respondent must submit within the proposal a Minority and Women's Business Enterprise participation plan. Failure to provide the minority and women's business participation plan at the time of proposal submission may result in the disqualification and rejection of the proposal. Please note that IDOA reserves the right to verify all information included on minority and women's business enterprise participation plans before making final determinations of the respondent's

responsiveness.

Additionally, the plan must show that there are IDOA certified racial minority owned enterprises and IDOA certified women owned enterprises participating in the contract. The participation can be, but is not limited to, a subcontractor or second tier participation with common suppliers such as office supplies, courier services and/or janitorial services. The respondent submitting an offer must indicate the name of the IDOA certified racial and women owned firms that will participate in the award, a contact name and phone number, the service to be supplied and the specific dollar amount from this contract that will be directed toward each firm.

The respondent is expected to demonstrate a good faith effort to meet the participation goal of 5% for IDOA certified minority participation and 5% for IDOA certified women owned business participation. A good faith effort consists of documenting the effort that was made to achieve the goal. Respondents are encouraged to contact and work with the Minority Business and Women's Enterprise Division of the Indiana Department of Administration to design a plan to meet established goals. The Minority Business and Women's Enterprise Division's website address is as follows: <a href="www.in.gov/idoa/minority">www.in.gov/idoa/minority</a> and contains a complete list of all IDOA certified MWBE's.

By submission of the proposal, the respondent thereby acknowledges and agrees to be bound by the regulatory processes involving the State of Indiana's Minority and Women's Business Enterprise Program. Questions involving the regulations governing the minority and women's business enterprise participation plan should be directed to:

Minority Business and Women's Enterprise Division Indiana Department of Administration 402 W. Washington St., Room W469 Indianapolis, IN 46204 (317) 233-6607

## 1.23 U.S. MANUFACTURED

Each proposal must contain an explanation of what steps will be used to encourage the use of American-made products. The State does apply a U.S. Manufactured preference as set out in IC 5-22-15-21.

#### 1.24 RECYCLED PRODUCTS

Each proposal should contain an explanation of what recycled materials are used and identify the recyclability of products offered in response to this RFP.

#### 1.25 AMERICANS WITH DISABILITIES ACT

The respondent specifically agrees to comply with the provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.* and 47 U.S.C. 225).

## 1.26 SUMMARY OF MILESTONES

The following timeline is only an illustration of the RFP process. The dates associated with each step are not to be considered verbatim. Due to the unpredictable nature of the evaluation period, these dates are commonly subject to change. At the conclusion of the evaluation process all respondents will be informed of the evaluation team's findings.

<b>COMPLETION DATE</b>
March 30 <sup>th</sup> , 2005
April 1 <sup>st</sup> , 2005
April 8 <sup>th</sup> , 2005
April 15 <sup>th</sup> , 2005
May 4 <sup>th</sup> , 2005
May 11 <sup>th</sup> , 2005
May 17 <sup>th</sup> , 2005
May 24 <sup>th</sup> , 2005
May 27 <sup>th</sup> , 2005
May 31 <sup>st</sup> , 2005
June 3 <sup>rd</sup> , 2005
June 6 <sup>th</sup> , 2005
June 10 <sup>th</sup> , 2005
June 13 <sup>th</sup> , 2005
June 14 <sup>th</sup> , 2005
June 14 <sup>th</sup> , 2005
June 29 <sup>th</sup> , 2005
June 30 <sup>th</sup> , 2005

<sup>\*</sup> These dates are subject to the determination of the need for discussions. If discussions are not required, the process could reach a completion date at least four weeks earlier than the listed date for contract signature.

# SECTION TWO PROPOSAL PREPARATION INSTRUCTIONS

#### 2.1 GENERAL

To facilitate the timely evaluation of proposals, a standard format for proposal submission has been developed and is documented in this section. All respondents are required to format their proposals in a manner consistent with the guidelines described below:

- Each item must be addressed in the respondent's proposal or the proposal may be rejected.
- The transmittal letter should be in the form of a letter. The business and technical proposals must be organized under the specific section titles as listed below.
- The State may, at its option, allow all respondents a five-calendar-day period to correct errors or omissions to their proposals. Should this necessity arise, the State will contact each respondent affected. Each respondent must submit written corrections to the proposal within five calendar days of notification. The intent of this option is to allow proposals with only minor errors or omissions to be corrected. Major errors or omissions, such as the failure to include prices, will not be considered by the State as a minor error or omission and may result in disqualification of the proposal from further evaluation.

#### 2.2 TRANSMITTAL LETTER

The Transmittal Letter must address the following topics except those specifically identified as "optional."

2.2.1 Summary of Ability and Desire to Supply the Required Products and Services

The transmittal letter must briefly summarize the respondent's ability to supply the requested products and services that meet the requirements defined in Section Three of this RFP. The letter must also contain a statement indicating the respondent's willingness to provide the requested products and services subject to the terms and conditions set forth in the RFP including, but not limited to, the State's mandatory contract clauses.

# 2.2.2 Signature of Authorized Representative

A person authorized to commit the respondent to its representations and who can certify that the information offered in the proposal meets all general conditions including the information requested in Section 2.3.4, must sign the transmittal letter. In the transmittal letter please indicate the principal contact for the proposal along with an address, telephone and fax number as well as an e-mail address if different than individual authorized for signature.

#### 2.2.3 Respondent Notification

Unless otherwise indicated in the Transmittal Letter, respondents will be notified via e-mail.

It is the respondent's obligation to notify the Procurement Division of any changes in any address that may have occurred since the origination of this solicitation. The Procurement Division will not be held responsible for incorrect vendor/contractor addresses.

#### 2.2.4 Other Information

This item is optional. Any other information the respondent may wish to briefly summarize will be acceptable.

#### 2.3 BUSINESS PROPOSAL

The Business Proposal must address the following topics except those specifically identified as "optional."

## 2.3.1 General (optional)

This section of the business proposal may be used to introduce or summarize any information the respondent deems relevant or important to the State's successful acquisition of the products and services requested in this RFP.

#### 2.3.2 Respondent Company Structure

The legal form of the respondent's business organization, the state in which incorporated (if a corporation include a copy of incorporation certificate), the types of business ventures in which the organization is involved, and a chart of the organization are to be included in this section. If the organization includes more than one product division, the division responsible for the development and marketing of the requested products and services in the United States must be described in more detail than other components of the organization.

#### 2.3.3 Company Financial Information

This section must include the respondent's financial statement, such as an income statement or balance sheet, for each of the two most recently completed fiscal years. The financial statements must demonstrate the respondent's financial stability. If the organization includes more than one product division, separate financial statements must be provided for the division responsible for the development and marketing of the

requested products and services.

# 2.3.4 Integrity of Company Structure and Financial Reporting

This section must include a statement indicating that the CEO and/or CFO has taken personal responsibility for the thoroughness and correctness of any/all financial information supplied with this proposal. The particular areas of interest to the State in considering corporate responsibility, which are mandatory, include the following items: separation of audit functions from corporate boards and board members, if any, the manner in which the firm assures board integrity, the separation of audit functions and consulting services. The State of Indiana will consider the information offered in this section to determine the responsibility of the offeror per IC 5-22-16-1(d).

Federal law H.R. 3763, the "Sarbanes Oxley Act of 2002" is NOT directly applicable to this acquisition; however, its goals and objectives were used to develop our mandatory areas of interest.

#### 2.3.5 Facilities and Resources

The respondent should include information with regard to the organization's resources that it deems advantageous to the successful provision of the requested products and services. This might include management capabilities and experience, technical resources, and operational resources not directly assigned to this project, but available if needed.

## 2.3.5.1 Prime Vendor Information including:

- 2.3.5.1.1 The Company (the Prime Company MUST be specified).
- 2.3.5.1.2 Include proof of current professional licensure and certification (e.g. ISO9002, NCEES, ACSM, ASPRS, etc.).
- 2.3.5.1.3 Names, qualifications and experience of personnel to be assigned to the project.
- 2.3.5.1.4 Resumes of key persons to be assigned to the project.
- 2.3.5.1.5 Experience

Prime vendor shall specify in detail experience in similar large scale mapping projects. Evaluation will be based on successful experience, with special emphasis for successful mapping projects like the overall project being undertaken by the State. Statement shall include documented successful completion of projects of similar scope in size and complexity that were delivered on time and within budget, and using the same subcontractors, if relevant.

- 2.3.5.2 Subcontractor "A" Information should include (if applicable and if more than one subcontractor, continue with successive sections 2.3.5.3, 2.3.5.4, etc. for each subcontractor):
  - 2.3.5.2.1 The Company
  - 2.3.5.2.2 Include proof of current professional licensure and certification (e.g. ISO9002, NCEES, ACSM, ASPRS, etc.)
  - 2.3.5.2.3 Names, qualifications and experience of personnel to be assigned to the project.
  - 2.3.5.2.4 Resumes of key persons to be assigned to the project.
  - 2.3.5.2.5 Experience

Specify the experience of Subcontractor A in similar mapping projects. Evaluation will be based on successful experience, with special emphasis for successful mapping projects like the overall project being undertaken by CTASC. Statement shall include documented successful completion of projects of similar scope in size and complexity that were delivered on time and within budget, and using the same subcontractors, if relevant.

## 2.3.6 Required Contract Clauses

Indiana law requires the inclusion of certain language in all contracts. Also, the nature of the products and services requested in this RFP may present a need for the inclusion of certain commitments in any contract resulting from this RFP. Attachment B of this document contains a sample contract that could be similar to the one resulting from this RFP. Some clauses within the sample contract are mandatory and other clauses are desirable to the State. NOTE: Those clauses that are mandatory are as follows:

Duties of contractor, rate of pay, and term of contract Conflict of Interest Drug-free workplace provision and certification Funding Cancellation Key Personnel Non-collusion and Acceptance Non-discrimination clause Ethics

Respondents should review these clauses in detail because a specific agreement to these clauses is required in the Transmittal Letter. If a respondent wishes to suggest alternative wording for one or more of these mandatory clauses without changing the intent, these suggestions may, at the respondent's option, be documented in this section of the Business Proposal. The respondent's suggested language will be considered by the State during the contract negotiation process. The State's willingness to

consider alternative language does not change the requirement that the respondent agree in the Transmittal Letter to the acceptance of the State mandatory clauses as written.

Attachment B also includes a number of desirable clauses that the State seeks to include in any contract resulting from this RFP but which it does not consider mandatory. For each of these desirable clauses, the respondent should either indicate that the desired clause is acceptable as worded; suggest specific alternative wording to address issues raised by the specific clause; or indicate the desired clause is unacceptable and state why. Any additional language required by a respondent that is found to be unacceptable to the State may lead to the rejection of that respondent's proposal.

## 2.3.7 Pricing

The State requests the pricing associated with this RFP be a firm proposal price that must remain open and in effect for a period of not less than 180 days from the proposal due date as well as any extensions agreed to in the course of contract negotiations.

Pricing for this proposal is to be presented as formatted in Table 1 below.

**Table 1. Project Proposal Costs** 

		Item Cost	<b>Total Cost for Section</b>
2.4.1	Total Cost QA/QC Project Management		
2.4.2	Total Cost for Review of Deliverables for Completeness		
2.4.2.1	Review of metadata		
2.4.2.2	Review of coordinates and projection		
2.4.2.3	Review of delivery format	_	
2.4.3	Review of Deliverables for Aesthetics	_	

Table 1. Project Proposal Costs (cont'd)

	Item (	Cost	otal Cost for Section
2.4.4	Review for Horizontal Accuracy		
2.4.4.2	Total Cost for 200 QA/QC Defined Points		
2.4.4.3	Cost per QA/QC confirmation point		
2.4.4.7	Reports of horizontal accuracy for each lift		
2.4.5	Total Cost for Review of Ground Control		
2.4.6	Total Cost Review of Analytical Triangulation		
2.4.7	Total Cost Review of Digital Surface Model		
2.4.8	Total Cost for Reports of Horizontal Accuracy for each set of County Imagery		
2.4.9	<b>Total Cost for Delivery of Product to State and Counties</b>		
	Total Proposal Cost		

## 2.3.8 References

The respondent must include a list of at least three (3) clients for whom the respondent has provided products and services that are the same and, or, similar to those products and services requested in this RFP. Any state government for whom the respondent has provided these products and services should be included; also to be included should be clients with locations near Indianapolis, as site visits may be arranged. Information provided should include the name, address, and telephone number of the client facility and the name, title, and phone/fax numbers of a person who may be contacted for further information. The more similar the referenced products and services are to those requested in this RFP a greater weight may be attached to the references in the State's evaluation process.

## 2.3.9 Registration to do Business

Selected respondents and any proposed subcontractors providing the products and/or services required by this RFP must have been registered to do business within the state by the Indiana Secretary of State at least 45

days before the issuance of the RFP to be considered responsible. The contact information for this office may be found in Section 1.20 of this RFP. This process must have been concluded 45 days prior to the issuance of the RFP. It is the successful respondent's responsibility to complete the required registration with the Secretary of State and to be aware of any proposed subcontractors registration status. The respondent must indicate the status of registration, if applicable, in this section of the proposal.

## 2.3.10 Authorizing Document

Respondent personnel signing the Transmittal Letter of the proposal must be legally authorized by the organization to commit the organization contractually. This section shall contain proof of such authority. A copy of corporate bylaws or a corporate resolution adopted by the board of directors indicating this authority will fulfill this requirement.

#### 2.3.11 Subcontractors

The respondent must list any subcontractor's name, address and state of incorporation that are proposed to be used in providing the required products and services. The subcontractor's responsibilities under the proposal, anticipated dollar amount for subcontract, the subcontractor's form of organization, indication that the subcontractor was registered with the Indiana Secretary of State at least 45 days prior to the issuance date of this RFP (see Section 1.14 for forms of businesses required to register), if required, and an indication from the subcontractor of a willingness to carry out these responsibilities are to be included for each subcontractor. This assurance in no way relieves the respondent of any responsibilities in responding to this RFP or in completing the commitments documented in the proposal. The respondent must indicate which, if any, subcontractors qualify as a Minority or Women Owned Business under IC 4-13-16.5-1. See Section 1.22 and Attachment A for Minority and Women Business information.

#### 2.3.12 Respondent Contract Requirements (Optional)

If the respondent wishes to include any language other than that discussed in the Business Proposal, this language should be included in this section. For each clause included in this section, the respondent should indicate that the clause is required by the respondent in any contract resulting from this RFP and why it is required (if the required clause is unacceptable to the State, the respondent's proposal may be considered unacceptable) or indicate that the clause is desired (but not required) by the respondent in any contract resulting from this RFP.

## 2.4 TECHNICAL PROPOSAL

The Technical Proposal must be divided into the sections as described below. Every point made in each section must be addressed in the order given. The same outline numbers must be used in the response. RFP language should not be repeated within the response. Where appropriate, supporting documentation may be referenced by a page and paragraph number. However, when this is done, the body of the technical proposal must contain a meaningful summary of the referenced material. The referenced document must be included as an appendix to the technical proposal with referenced sections clearly marked. If there are multiple references or multiple documents, these must be listed and organized for ease of use by the State.

## 2.4.1 Quality Assurance / Quality Control Project Management

Respondent will describe how their proposed QA/QC project management and scheduling will complement the contract schedule for photography acquisition. The schedule for acquisition, production and delivery is as follows.

TASK	START DATE	COMPLETION
Project kick-off Meeting		25-Jan-05
Delivery of pre-project deliverables (flight plan, procedures manual,		8-Feb-05
etc.)		
Ground control (planning, point selection, GPS observations, network	1-Feb-05	1-Dec-05
processing)		
Delivery of control report (progressive status via web interface)	30-May-05	15-Dec-05
Acquisition of ADS40 imagery	28-Feb-05	15-May-05
Delivery of acquisition report		31-May-05
Aerotriangulation	1-Jun-05	15-Dec-05
DEM and DSM creation	8-Jun-05	15-Nov-05
Ortho processing and finishing	8-Jun-05	31-Jan-05
Delivery of pilot project	-	16-Jun-05
Pilot project acceptance by CTASC		30-Jun-05
Delivery of DEM and DSM in .IMG format (incremental deliveries 30	1-August-05	31-Dec-05
days after County ortho final acceptance by CTASC)	_	
Delivery of color orthoimagery for 6" and 1' GSD (incremental,	1-Jul-05	15-Nov-05
delivered on external hard-drive in lots by tile for QA/QC/QC)		
Final delivery of color orthoimagery for 6" and 1' GSD (incremental,	15-Jul-05	1-Dec-05
county sets upon QA/QC/QC acceptance)		
Delivery of color orthoimagery, 1-meter GSD (resampled from 6" and	1-Dec-05	15-Dec-05
1" GSD imagery, incrementally by county and quad)		
Delivery of color IR orthoimagery, 1-meter GSD (incrementally by	1-Nov-05	31-Jan-06
quad)		
QA/QC/QC of 6" and 1' orthoimagery, DEM and DSM by CTASC	15-Jun-05	31-Dec-05
(incremental)		
QA/QC/QC of 1-meter color and CIR orthoimagery by CTASC	1-Nov-05	31-Jan-06
(incremental)		
Corrections and submission of metadata (incremental deliveries 30 days	15-Aug-05	28-Feb-06
after County ortho final acceptance by CTASC)		
Submission of MrSIDs (tiled, countywide incremental deliveries 30	15-Aug-05	28-Feb-06
days after County ortho final acceptance by CTASC)		

# 2.4.1.1 Quality Assurance Planning

Respondent will describe in this section the Quality Assurance plan that is requested along with delivery timeframe for the requested document. The following are the salient points that should be addressed in your response.

Proposals shall describe the approach to product workflow, review of deliverables, and communication. Upon selection, the QA/QC vender shall present a detailed written plan for product flow, review of deliverables, and communication. This document shall include specific tasks, timeframes and the staff responsible for performing each task. The document shall include rules for acceptance and rejection and any review and tracking forms used by the QA/QC staff. This is intended to be a living document, continuously reviewed, revised and improved throughout the project. The most current version of the QA/QC plan document, along with QA/QC status documents, shall be electronically available to the State at all times.

#### 2.4.1.2 Communication

Respondent will describe in this section the communication plan that they propose to implement during the contract term. Salient points to be addressed in the communication plan follow.

Continuous communication between the QA/QC vendor, the State and EarthData is mandatory. The QA/QC vendor shall provide a weekly written status report of activities and problems, anticipated issues and production goals. Systematic problems with accuracy, aesthetics or timeliness shall be reported to the State immediately.

The QA/QC vendor is expected to work collegially with EarthData and EarthData's subcontractors. The State expects to be notified of significant communication between the QA/QC vendor and EarthData. As a rule, the QA/QC vendor will deal with the State, and copy correspondence and communication to EarthData. Issues between the QA/QC vendor and EarthData shall be decided by the State. Continued disruptive issues between EarthData and the QA/QC vendor may result in termination of the QA/QC vendor's contract.

It is not the role of the QA/QC vendor to find fault in the processes used by EarthData. Suggestions for process improvement will be welcomed and will be carefully considered. The role of the QA/QC vendor is to assure products meet specifications. We do not anticipate that there will be many (if any) rejected products.

Public comment disparaging the project or EarthData will be grounds for immediate termination of the QA/QC vendor.

# 2.4.1.3 Project Meetings

Respondent will describe in this section the schedule for meetings. Salient points to be

addressed by the respondent in this section follow.

The QA/QC vendor shall convene a QA/QC project startup meeting with the State in Indianapolis.

The QA/QC vendor shall organize and facilitate at least one conference call per month for the duration of the project. The QA/QC vendor shall draft meeting agendas and distribute to participants at least 2 days ahead of each call. The QA/QC vendor shall take minutes from meetings and scheduled calls, and these minutes shall be delivered as part of the weekly report for the following week.

## 2.4.1.4 Timeliness of Review

Respondent will describe how timeliness of review is to be assured. Salient points to be addressed by the respondent in this section follow.

The delivery schedule for orthophotography and ancillary products is very aggressive. Product delivery is incremental in lots from approximately June 2005 to March 2006, with primary deliverables complete by December 2005. It is anticipated that the QA/QC schedule closely follow the incremental delivery schedule, with a two (2) week turnaround on each delivery lot. The QA/QC vendor is required to "keep up" with the delivery schedule of the imagery products. Respondent will indicate how long they anticipate review of each tile for aesthetics and completeness. Respondent will also indicate how long will be needed for horizontal accuracy determinations for each "lift". Respondent's proposal shall indicate the capacity to review and process the deliveries. Indicate how capacity could be increased if the QA/QC vendor falls behind schedule.

## 2.4.1.5 Review of Mission Plan

Respondent will describe their approach for review of mission planning documents. Salient points to be addressed by the respondent in this section follow.

The acquisition vendor has been delivering several documents to the State before the flights began, including flightline plans and tiling schemes. The QA/QC vendor shall review these, and provide any suggestions for improving the downstream products and/or schedule.

# 2.4.1.6 Participation in Acquisition Vendor Meetings and Planning

Respondent will describe how they plan to participate in acquisition vendor coordination meetings.

The acquisition vendor shall be conducting several meetings to coordinate aspects of the project, to include flight operations and ground control. It is recommended that the QA/QC vendor attend these meetings. Some will be in Indianapolis; some will be in Frederick, MD.

## 2.4.1.7 Process Tracking

Respondent will describe oversight appropriate for tracking production processes. Salient points to be addressed by the respondent in this section follow.

During the process, EarthData will be maintaining a tracking website, which will have flight lines, daily flight capture areas (lifts), and ortho production progress. The QA/QC vendor shall monitor progress, and communicate to the State if there are problems with the site or the progress. The QA/QC vendor may make suggestions for improving the tracking site.

The website will be driven by a database, which will be available for download at any time. The QA/QC vendor shall monitor the tracking site at least daily, and note any issues with the website, database or the project.

The acquisition vendor will be providing regular production reports. The QA/QC vendor shall review all of these reports, and comment to the State on any issues.

As the QA/QC vendor receives deliverables, these shall be tracked in an electronic database. The status of deliverables through the QA/QC process, and acceptance status shall be maintained and displayed graphically. Specifically, the tracking database shall include orthophoto tiles, counties, and quarter-quadrangles, infrared quarter-quadrangles, and digital surface model tiles. The QA/QC vendor shall also electronically track the ancillary deliverables, to include ground control reports and analytical triangulation reports.

There will be some opportunity for flight mission errors, notably, clouds, snow, sun angle and flightline sidelap. If the QA/QC vendor notices any flight mission specifications that are not being met, these shall be reported to the State.

Rejected deliverables (if any) shall be communicated as soon as practical to the State.

#### 2.4.2 Review of Deliverables for Completeness

Respondent will describe proposed review of deliverables for completeness. Salient points to be addressed by the respondent in this section follow.

The QA/QC vendor shall review each of the deliverables for proper geographic coverage, file naming convention, gaps, overlap and buffer. Each file shall have a corresponding world file. There will be a 1,000 foot buffer outside the State border, or to the opposite bank where the border is a river.

Every tile deliverable (approximately 70,000 files) shall be opened, and compared to its neighboring tiles (north-south and east-west). No gaps are allowed between tiles. No overlaps are allowed between tiles. Tiles shall be named by a concatenation of the X,Y coordinates of the lower left corner of the tile. Each tile will be checked to see that it is

named properly, and the name properly reflects its correct geographic location in the State. All 1-foot pixel tiles (except on the State border) should be the identical file size for TIFF format. All 6-inch pixel tiles (except on the State border) should be the identical file size for TIFF format. Some variation in file size is acceptable for MrSID format deliverables. The QA/QC vendor shall verify the file size of each tile.

Every county mosaic file (92 files each for the TIFF and MrSID) shall be opened, and compared to surrounding counties. Mosaics shall be seamless. There will be overlaps. There may not be gaps. There may be no "no-data" (or black) areas. County names shall not have spaces in the lettering. Two word county names shall be as follows: Dekalb, Dubois, LaGrange, LaPorte, StJoseph. Each County file will be checked to see that it is named properly, and the file is in its correct geographic location in the State. Each County should overlap its neighbors by at least one tile width.

Every quarter-quadrangle (QQ) deliverable file (approximately 2800 each for the color and the color-IR) shall be opened and compared to surrounding QQs. There may not be gaps or overlaps. QQs shall be named according to the USGS quarter-quadrangle naming convention. Each QQ shall be checked to see that it is named properly, and the name properly reflects its correct geographic location in the State. The file size of each QQ should be identical to its east-west neighbor (except at the State border). The QA/QC vendor shall verify the file size of each quarter-quadrangle file.

Accept for completeness if:	Reject for completeness if:
Tiles provide a complete coverage with no overlap,	Tiles do not open. Tiles have gaps or overlaps.
are named correctly, and are in the correct	Tiles are not named correctly. Tiles are not in the
geographic location.	correct geographic location. World files are
	missing. Tile size is incorrect. Buffers are not
	adequate.
County files provide a complete coverage	County files do not open. County files do not have
(including the one-tile buffer), with no "no-data"	a complete coverage. Counties are not in the
areas, are named correctly and are in the correct	correct geographic location. World files are
geographic location.	missing. Buffers are not adequate.
Quarter-Quadrangle files provide a complete	QQ files do not open. Files have gaps or overlaps.
coverage with no overlap, are named correctly, and	Files are not named correctly. Files are not in the
are in the correct geographic location.	correct geographic location. World files are
	missing. File size is incorrect. Buffers are not
	adequate.

#### 2.4.2.1 Review of Deliverables for Metadata

Respondent will describe proposed review of metadata. Salient points to be addressed by the respondent in this section follow.

EarthData will provide FGDC compliant metadata for each set of deliverables. The QA/QC vendor will verify that the metadata files are complete and correct.

# 2.4.2.2 Review of Deliverables for Coordinates and Projection

Respondent will describe proposed review of coordinates and projection. Salient points

to be addressed by the respondent in this section follow.

Each deliverable file shall be in its correct projection and measurement units. Six-inch and 1-foot resolution tiles shall be in NAD83 (with the 1988 adjustment), Indiana State plane (east or west), in US Survey feet. Each tile shall be exactly 4,000 feet by 4,000 feet. County deliverables shall be in Indiana State plane, in US Survey feet. Quarter-Quadrangle files shall be in UTM Zone 16 North, NAD83/1988 meters.

Most tiles will have 1-foot pixels. The tiles in some counties will have 6-inch pixels. The following counties are scheduled to receive 6-inch pixels, Dubois, Elkhart, Floyd, Hamilton, Kosciusko, Lake, LaPorte, Marion, Monroe, Perry, Steuben, Tippecanoe, Vanderburgh. The State does not anticipate additional counties, but it is possible. A list of counties receiving 6-inch pixel tiles will be provided to the QA/QC vendor prior to the beginning of the project.

Accept for Coordinates and Projection if:	Reject for Coordinates and Projection if:
Tiles are in the correct State Plane projection, in	Tiles are not in the correct State Plane projection.
US Survey feet. Tile size is correct.	Tiles are not in US Survey feet.
Pixel size is correct.	Pixel size is incorrect.
County files are in the correct State Plane	County files are not in the correct State Plane
projection, in US Survey feet.	projection. Files are not in US Survey feet.
Quarter-Quadrangle files are in UTM meters.	QQ files are not in the correct UTM projection.
	Files are not in meters.

## 2.4.2.3 Review of Deliverables for Delivery Format

Respondent will describe proposed review of delivery format. Salient points to be addressed by the respondent in this section follow.

All tiles, counties, and quarter-quadrangles will be delivered in TIFF with world files. A "public version" of the 1-foot and 6-inch tile set will be produced in which up to 5 geographic areas will be re-sampled to 1-meter resolution. All counties and quarter-quadrangles will also be delivered in MrSID (lossless) file format with world files.

Deliverable	File Format
1-foot and 6-inchTiles	TIFF with World file
1-foot and 6-inch Tiles – PUBLIC VERSION	TIFF with World file
County	TIFF with World file
County	MrSID lossless compression
Quarter-Quadrangle	TIFF with World file
Quarter-Quadrangle	MrSID lossless compression

The QA/QC vendor shall review all files for the appropriate file format.

Accept for Delivery Format if:	Reject for Delivery Format if:
Tiles, counties, and quarter-quadrangles are in the	Tiles, counties, and quarter-quadrangles are not in
correct file format.	the correct file format.

#### 2.4.3 Review of Deliverables for Aesthetics

Respondent will describe proposed review of photo aesthetics. Salient points to be addressed by the respondent in this section follow.

The QA/QC vendor will perform an aesthetic review of all files, to include looking for artifacts, color and tone balance; and processing errors, such as radiometry, warping, distortion and mosaicking.

The aesthetic review will be more subjective than any other QA/QC processes. CTASC's concern is the usability of the orthophoto products. A problem in a farm field, water body or forest is of less concern than the same problem in an urban area.

#### 2.4.3.1 Artifacts

The all-digital camera approach for this project is anticipated to eliminate blemishes, scratches, lint and smudges. CTASC expects there will be some sun reflectance from water bodies. This is of concern where the bank or some important object in the water is obscured. Otherwise, reflectance should not be an issue. There should be minimal sun flare reflectance from building glass, and in no case should detail on a building be obscured by sun reflectance. Reflectance from vehicles is not an issue.

## 2.4.3.2 Processing Errors

The ADS40 camera should not produce any radial distortion to the front or back of the flightline. There will be a modest lean at the sides of the photo strip. Significant lean may be an indication of improper flightline sidelap.

The QA/QC vendor will evaluate each file for issues with feathering, radiometry, mosaicking and warping. Photos should be bright and clear; color should be accurate. Feathering should be inconspicuous. Tone should be balanced within the tile and across tiles, taking into account that different flightlines may be captured on different days, and possibly weeks apart. Detail for the natural color photos should be visible in shadows; some detail in the CIR should be visible in shadows. There should be no photo smear or ghosts caused by relief distortion. Bridges, above-ground structures, and features under an overpass should not show warping.

Mosaic lines should never be visible through buildings. The State shall attempt to get a vector file of the mosaic matchlines from EarthData, but the ISTAR process is very automated, and the lines may not be available.

The QA/QC vendor is to look for stripes or other indications where a CCD in the ADS40 may not be registering properly, or where the ISTAR process is systematically causing errors in clarity, color, edgematch or tone.

Accept for Aesthetics if:	Reject for Aesthetics if:
Photos are useable and aesthetically pleasing.	Photos are not useable or aesthetically pleasing.

Photos are crisp, show true color, tone balances,	Color, tone, feathering or mosaicking are improper.
feathered and mosaicked properly.	
Photos do not have smear or ghosts.	Photos have smear or ghosts.
Bridges and above-ground structure edges are	Bridges or above-ground structures are warped.
straight.	
There are no systematic processing issues.	There are systematic processing issues which
	impact the aesthetics of the photos.

# 2.4.4 Review of Deliverables for Acceptable Horizontal Accuracy

Respondent will propose a process to review the horizontal accuracy of the orthophotography. Salient points to be addressed by the respondent in this section follow. This RFP defines a process based on the NSSDA calculations and a formula for calculating sample size based on RMSE (Root Mean Square Error). The State will accept alternate methodologies which can be defended statistically.

All reference to the pixel resolution will imply the following accuracies:

Pixel Resolution	NSSDA
(Ground Sample Distance)	(95% of points)
1-meter	5 meter or better
1-foot	5' or better
6-inch	2.5' or better

The orthophotos are required to meet NSSDA absolute accuracy standards by pixel size. Circular RMSE shall be used for horizontal accuracies. CTASC does not anticipate testing vertical accuracy, but if the need arises, linear RMSE calculations shall be used for vertical accuracy assessments.

Care should be taken in selection of control points for evaluation of horizontal accuracy. Selection of control points should strive to represent the different resolution products desired, the differing topography covered and, as possible, the different members of the acquisition team.

Statistical determination of Root Mean Square Error ground accuracy will be for the desired horizontal accuracies at the ninety-five (95) percent confidence level.

Calculation of the horizontal accuracy will be per the guidance document *Positional Accuracy Handbook, Using the National Standard for Spatial Data Accuracy to measure and report geographic data quality,* (PAH), published in October 1999, by the Minnesota Planning Land Management Information Center. The PAH guidance document is available for download from:

http://www.mnplan.state.mn.us/resource.html?Id=1852

A worksheet to facilitate calculation is also available from the same site.

#### 2.4.4.1 Well Defined Points

The State will have available up to 100 first-order ground control points (well defined points) available to the QA/QC vendor. Points will be photo-identifiable and with at least one point per lift. These points will be blind to EarthData and will not be used in the analytical triangulation solution or for orthophoto processing.

## 2.4.4.2 QA/QC Defined Points

The QA/QC vendor will be responsible for obtaining coordinates for 200 quality assurance points (QA/QC defined points), approximately 2 points per lift. These points will be distributed so that at least one point exists per county. The QA/QC vendor may choose to retrieve existing points from the Surveyor's office or other sources if practical. Use of points with coordinates that have been determined by others outside of this project must be demonstrably appropriate for use in this role (documentation and verifiable accuracy). The QA/QC vendor shall be prepared to collect the coordinates for additional points in the field. None of these points shall duplicate the well defined points.

## 2.4.4.3 QA/QC Confirmation Points

The QA/QC vendor MAY be responsible for obtaining coordinates for an additional 100 quality assurance points (QA/QC confirmation points). The QA/QC vendor may choose to retrieve existing points from the Surveyor's office or other sources, if practical. Use of points with coordinates that have been determined by others outside of this project must be demonstrably appropriate for use in this role (documentation and verifiable accuracy). The QA/QC vendor shall be prepared to collect the coordinates for additional points in the field. None of these points shall duplicate the well defined points or the QA/QC defined points.

## 2.4.4.4 First Determination

The QA/QC vendor will make a first determination of the geographic accuracy of the products from each lift. For each lift, the QA/QC vendor will calculate the horizontal accuracy of the well defined and QA/QC defined points pooled together, per the *Positional Accuracy Handbook* (PAH). The QA/QC vendor shall use at least three (3) points per lift for the first determination calculation.

For each lift, the QA/QC vendor will determine the number of samples needed to find the standard error of the population with a 95% level of confidence within the desired precisions as follows.

$$(n) = (zs/d)^2$$

Where:

n =the number samples needed

d = the desired precision of either +/- 5 foot or +/- 2.5 for one-foot and six-inch

resolution, respectively

s = the Root Mean Square Error (radial) calculated per the PAH

z = 1.645 (one-tailed test statistic at 95% for a standard normal distribution)

If n is less than or equal to the total of well defined plus QA/QC defined points, AND the calculation of horizontal accuracy is within the desired precision (either 5 foot or 2.5 for one-foot and six-inch resolution, respectively) for the lift then no further work is required. The lift has passed on the first determination and the lift has an acceptable horizontal accuracy.

If n is greater than the total of well defined points plus QA/QC defined points for the lift, OR the calculation of horizontal accuracy is NOT within the desired precision (either 5 foot or 2.5 for one-foot and six-inch resolution, respectively) then the vendor shall notify the State that a confirmation test may be called for. The State will discuss the situation with EarthData and QA/QC vendor to determine what actions to pursue. If the State determines that additional testing is required, the QA/QC vendor shall proceed with confirmation testing.

## 2.4.4.5 Confirmation Testing

If the lift fails the first determination, the QA/QC vendor may be asked to make a confirmatory determination of the horizontal accuracy of the products for the lift.

Per instruction by the State, the vendor will collect additional QA/QC confirmation points.

The QA/QC vendor will recalculate the horizontal accuracy of the data using well defined, QA/QC defined and QA/QC confirmation points pooled together, per the PAH.

For each lift, the QA/QC vendor will recalculate the number of samples needed to determine the standard error of the population as follows.

$$(n) = (zs/d)^2$$

Where:

n =the number samples needed

d = the desired precision of either +/- 5 foot or +/- 2.5 for one-foot and six-inch resolution, respectively.

s = the Root Mean Square Error (radial) calculated per the PAH

z = 1.645 (one-tailed test statistic at 95% for a standard normal distribution)

If n calculated for the confirmation testing is less than or equal to the total of well defined, QA/QC defined plus QA/QC confirmation points, AND the calculation of horizontal accuracy is within the desired precision (either 5 foot or 2.5 for one-foot and six-inch resolution, respectively) for the lift then no further work is required. The lift has passed on the confirmation test and the lift has an acceptable horizontal accuracy.

If n calculated for the confirmation testing is greater than the total of well defined, QA/QC defined plus QA/QC confirmation points then the process is out of control and remedial action is called for.

The QA/QC vendor will notify the State.

#### 2.4.4.6 Remedial Action

The QA/QC vendor will notify EarthData and the State that remedial action is warranted as soon as a need for remedial action is identified. The State will discuss the situation with EarthData and QA/QC vendor to determine what actions to pursue.

Remedial action will proceed accordingly:

- 1) EarthData, the State and the QA/QC vendor will meet to discuss options for remedial action.
- 2) The first option will be a determination of whether the failure is caused by the statistical methods. Possible remedies include:
  - a. A different statistical treatment of the sample points would be called for due to a non-normal distribution of the RMSE. Non-normal distribution of the RMSE could occur if the sample points for the lift are split between disparate terrain types i.e. points in large expanses of flat (less than 2% slope) areas and points in several reaches of deeply gullied stream channels.
  - b. Collection of additional QA/QC confirmation points to bolster the reliability of the statistical determinations. However this is the least desirable since it could require an amendment to the QA/QC contract with additional funding.
- 3) Based on the outcome of Item 2 above, the second option would be a determination of whether the acquisition process is out of control. Remedial options would be left to EarthData to devise, and submitted to the State for approval.

## 2.4.4.7 Report of Horizontal Accuracy for each Lift

The QA/QC vendor will provide a report of the horizontal accuracy to the state for each lift. The report will include the statement:

Positional Accuracy: Tested ff.f feet horizontal accuracy at 95% confidence level

which is to be based on the PAH methodology for positional accuracy. The report is to include a concise listing of the control points used in making the accuracy determination. The report is to include documentation from the field or other sources as to the appropriateness of each point for its use in the assessment of accuracy. Documentation

provided for each control point should clearly indicate how the point can be recovered in the future and how the coordinates were determined. Control points for which coordinates were measured in the field (surveyed) as part of this contract shall include terrestrial photographs of the point.

Reports will include the worksheets used to make the determination of accuracy.

The reports will be provided to the state as Microsoft Office documents.

## 2.4.5 Review of Ground Control

Respondent will propose review of ground control for analytical triangulation. Salient points to be addressed by the respondent in this section follow.

The acquisition project calls for about five (5) ground control points per lift, a total of about 500 points for the state-wide project. Almost all points will be captured from specified photo identifiable sites provided to the surveyors by EarthData. Points will be collected by GPS, corrected to an active basestation and adjusted to the HARN (High Accuracy Reference Network).

The process to deliver control coordinates to EarthData will likely be digital, but should be checked once at the beginning of the process for units, projection and blunders.

EarthData will provide coordinates and locations of the ground control to the State. The QA/QC vendor shall validate that the location of the point is the site requested. The QA/QC vendor shall review the field report to make sure a point is adequately documented to be recovered by any skilled surveyor.

## 2.4.6 Review of Analytical Triangulation

Respondent will propose review of analytical triangulation. Salient points to be addressed by the respondent in this section follow.

Analytical triangulation reports will be provided by EarthData to the State. These will likely cover multiple lifts. The QA/QC vendor shall review the reports and evaluate them for closure and tolerance, and control points left out of the solution. Consistent issues with large misclosures or unused control may indicate a systematic problem, and shall be reported to the State.

#### 2.4.7 Review of Digital Surface Model and Digital Elevation Model

Respondent will propose review of the digital surface model (DSM) and digital Elevation Model (DEM). Salient points to be addressed by the respondent in this section follow.

EarthData will be calculating a new DSM and DEM based on ground control and autocorrelation techniques. The DSM will be a reflected surface. The DEM will be based on an automated pixel-to-pixel comparison; it will not be a true "bald-earth" terrain model. The ISTAR process may also mathematically cut the number of points to quicken the orthorectification processing. CTASC anticipates the DSM and DEM to have a 1-2 meter point spacing.

The DSM and DEM will be delivered by tile in ERDAS IMG format. The QA/QC vendor shall review the elevation model for completeness of coverage, and check the model for blunders in a 3D software environment.

## 2.4.8 Report of Horizontal Accuracy for each County

The QA/QC vendor will provide a report of the horizontal accuracy to the state for each county. The calculation of accuracy is to be based on QA/QC points (well defined, QA/QC defined and QA/QC confirmation) for all lifts intersecting the county. The report will include the statement:

Positional Accuracy: Tested ff.f feet horizontal accuracy at 95% confidence level

which is to be based on the PAH methodology for positional accuracy. The report is to include a concise listing of the control points used in making the accuracy determination. The report is to include documentation from the field or other sources as to the appropriateness of each point for its use in the assessment of accuracy. Documentation provided for each control point should clearly indicate how the point can be recovered in the future and how the coordinates were determined. Control points for which coordinates were measured in the field (surveyed) as part of this contract shall include photographs of the point.

Reports will include the worksheets used to make the determination of accuracy.

The reports will be provided to the state as Microsoft Office documents.

#### 2.4.9 Delivery of Product to State and Counties

The QA/QC vendor shall be responsible for physical delivery of QA/QC accepted products to the State and counties. Each county shall receive the following on DVD as its deliverable: county set of applicable 1-foot or 6-inch resolution orthophotography, a clearly "Public Version" if applicable, its corresponding county mosaic, color-IR imagery, and elevation products. The State is a recipient of all deliverables as specified in the State contract with EarthData.

The QA/QC vendor may propose value-added delivery products (such as a data viewer), although not required. Any proposed value-added delivery products <u>may not</u> impair the QA/QC and delivery schedule whatsoever.

# 2.5 MINORITY & WOMEN'S BUSINESS ENTERPRISES PARTICIPATION PLAN

A properly completed and signed MWBE Participation Plan (Attachment A) must be included as part of the proposal. Respondents must indicate the name of the IDOA certified racial minority and IDOA certified woman owned firm(s) with which it will work; the contact name and phone number at the firm(s); the service supplied by the firm(s); and the specific dollar amount from this contract that will be directed toward each firm. If the above mentioned goals (1.21) can not be achieved by directing proceeds from this contract toward IDOA certified racial minority and IDOA certified woman owned enterprises, the respondent may demonstrate that an amount, equal to each of the above goals, of the firms overall annual proceeds (from all business) are directed to IDOA certified racial minority and/or woman owned enterprises. Please note: Respondents' claims for participation will be validated prior to contract award.

#### 2.6 INDIANA ECONOMIC IMPACT

All companies desiring to do business with state agencies must complete an "Indiana Economic Impact" form (Attachment C). The form asks for, among other information:

- a. The amount of the contract that is being allocated for payroll and benefits to Indiana residents
- b. The amount that is being awarded to Indiana subcontractors and suppliers
- c. The amount that is being subcontracted to Indiana certified minority and women owned businesses

The collection and recognition of the information collected with the Indiana Economic Impact form places a strong emphasis on the economic impact a project will have on Indiana and its residents regardless of where a business is located. The collection of this information does not restrict any company or firm from doing business with the state.

# SECTION THREE PROPOSAL EVALUATION

#### 3.1 PROPOSAL EVALUATION PROCEDURE

The State of Indiana has selected a group of personnel to act as a proposal evaluation team. Subgroups of this team, consisting of one or more team members, will be responsible for evaluating proposals with regard to compliance with RFP requirements. All evaluation personnel will use the evaluation criteria stated in Section 3.2.

The procedure for evaluating the proposals against the evaluation criteria will be as follows:

- 3.1.1 Each proposal will be evaluated for form on a pass/fail basis. Proposals that are incomplete or otherwise do not conform to proposal submission requirements will normally be eliminated from consideration. Respondents should note that agreement to the State's mandatory contract clauses is required in the Transmittal Letter and will be evaluated for such under the form category.
- 3.1.2 Each proposal will be evaluated on the basis of the categories included in Section 3.2. A point/percentage score will be established for each category.
- 3.1.3 If technical proposals are close to equal, greater weight could be given to price.
- 3.1.4 Based on the results of this evaluation, the qualifying proposal determined to be the most advantageous to the State, taking into account all of the evaluation factors, may be selected by IDOA and CTASC for further action, such as contract negotiations. If, however, IDOA and CTASC decide that no proposal is sufficiently advantageous to the State, the State may take whatever further action is deemed necessary to fulfill its needs. If, for any reason, a proposal is selected and it is not possible to consummate a contract with the respondent, IDOA may begin contract preparation with the next qualified respondent or determine that no such alternate proposal exists.

#### 3.2 EVALUATION CRITERIA

Proposals will be evaluated based upon the proven ability of the respondent to satisfy the requirements of the RFP in a cost-effective manner. Each of the evaluation criteria categories is described below with a brief explanation of the basis for evaluation in that category. The percentage of the total point score associated with each category is indicated following the category name (total maximum points = 100).

# 3.2.1 Adherence to Requirements (20 points)

## 3.2.2 Overall Management Judgment (20 points)

## 3.2.2 <u>Indiana Economic Impact (20 points)</u>

See Section 2.6 for additional information.

(The amount of the project being allocated for gross payroll and related fringe benefits for employees that live in Indiana + the amount allocated for subcontractors and suppliers located in Indiana + the amount allocated for State of Indiana certified minority and/or women owned businesses located in Indiana) divided by (the total amount of the proposal) = percentage of proposal's impact on the Indiana economy.

The percentage impact on the Indiana economy will be multiplied by the points allocated for Indiana Economic Impact (Section 3.2) and the resulting number will be the points awarded for Indiana Economic Impact.

## 3.2.4 <u>Price (20 points)</u>

# 3.2.5 <u>Minority (10 points) & Women's Business (10 points) Participation Plan</u> (20 points)

Points for each element will be awarded by the corresponding participation indicated in the response in relation to the required amount set out in the Request for Proposal.

Points will be calculated and awarded as follows: The percentage of IDOA certified Minority and/or Women's participation will be multiplied against the total amount of the respondent's proposal. The amount actually proposed for IDOA certified Minority and/or Women's participation will be divided by the maximum or denominator. The resulting percentage will be multiplied against the total points allowed, currently 10 points for each category. The result will be the points scored for that response.

# 3.3 PROPOSAL CERTIFICATION

Responses to this solicitation serve as a warrant that the responding entity has properly registered as required by law with the Secretary of State and that it has no current or outstanding criminal, civil, or enforcement actions initiated by the State of Indiana, and it agrees that it will immediately notify the State of any such actions. The respondent also certifies that neither it nor its principals are presently in arrears in payment of its taxes, permit fees or other statutory, regulatory or judicially required payments to the State of Indiana. Any respondent agrees that the State may confirm, at any time, that no such

liabilities exist, and, if such liabilities are discovered, that State may bar the respondent from contracting with the State, cancel existing contracts, withhold payments to setoff such obligations, and withhold further payments or purchases until the entity is current in its payments on its liability to the State and has submitted proof of such payment to the State.

All proposals will be reviewed by members of CTASC and IDOA. References may be contacted. It is possible that persons participating in the selection process, through IDOA, will interview finalists. The Commissioner of IDOA or his designee will, in the exercise of his sole discretion, determine which proposals offer the best means of servicing the interests of the State. The exercise of this discretion will be final.